



Global Fishing Watch

Ocean sustainability through transparency, data-sharing and collaboration

Using the power of satellite tracking and cutting-edge data analysis, Global Fishing Watch is helping governments to tighten control of their fisheries and meet sustainability goals.

About Global Fishing Watch

Global Fishing Watch (GFW) is an independent, international non-profit organization dedicated to advancing the sustainability of our ocean through increased transparency in fisheries and scientific research. By transforming monitoring and analysis of the global fishing fleet, we support governments to more effectively address threats to marine resources, security and coastal communities.

We track around 65,000 of the world's largest fishing vessels using satellite data, showing their movements in near real-time via our free online platform.

More than 40,000 people have registered to use our public map and data, including government, academia, civil society and the fishing sector.



Supporting global goals

GFW fully supports the United Nations Sustainable Development Goals and declarations at the G7 and G20. In particular, we aim to advance global efforts to eliminate illegal, unreported and unregulated (IUU) fishing, support effective management of marine

protected areas and improve maritime security. We do much of our scientific research in cooperation with government agencies, who use our satellite-based vessel monitoring to enhance their fisheries management.

Transparency strengthens fisheries management

Where countries publicly share their vessel data we can create a more complete and connected picture of global fishing activity. Law-abiding fishers are tracked easily and openly, demonstrating their compliance. Rogue operators stand out due to

their patchy track record or suspicious behavior. Compliant fishers can be rewarded through faster, more efficient port entry and landings. Unauthorized vessels, and those with a history of non-compliance, can be prioritized for inspection or denied port entry.

National leaders in support of data-sharing

In 2016, the Indonesian government launched a program with GFW to make its data from its vessel monitoring system (VMS) publicly available. As a result our platform now tracks the movements of all fishing vessels over 30GT (~5,000 vessels) registered to Indonesia and we provide analysis to support control and enforcement efforts. Subsequent commitments from Peru, Panama,

Chile, Costa Rica and Namibia, along with research partnerships with Australia, Canada, UK and US and government funding from Canada and Japan, are generating real momentum in support of fisheries data sharing. GFW is in dialogue with potential partners in several other countries across Latin America, Asia-Pacific and Africa.



FAO International Fisheries Symposium 2019 – launch of Global Atlas of AIS-based Fishing Activity, organized by FAO, Fundación AZTI, Seychelles Fishing Authority and Global Fishing Watch. © FAO Alessandra Benedetti

“AIS provides detailed tracks of tens of thousands of industrial fishing vessels, and this detailed tracking data has the potential to provide estimates of fishing activity and effort in near real time. This Atlas assesses this potential and shows that AIS can start to be considered a valid technology for estimating fishing indicators.”

FAO, GFW, AZTI and the Seychelles Fishing Authority

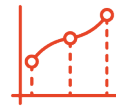
Impact on the water through transparency

GFW works with partner countries to create a more complete understanding of their fisheries, and strengthen maritime control and surveillance. To use our platform to track fishing activity, countries can either make it mandatory for all vessels to use the automatic identification system (AIS) or they can share their own VMS data. We can also include data from other systems, such as small-scale vessel trackers. We also encourage governments to publish their authorized vessel lists and transshipment authorizations, and to require the use of unique vessel identifiers, such as the International Maritime Organization (IMO) number.

We create a bespoke, private workspace for partner countries to analyze their data. Vessel tracking data published to the GFW public map is delayed 72 hours,

redacted and aggregated to release just enough information to see which vessels are compliant and which may need further investigation, without impacting proprietary data.

Using big data processing and machine learning, along with our team of analysts around the world, we provide analysis reports, fisheries monitoring tools and staff training to help authorities use and benefit from our technology. Our public map and carrier vessel portal provide a window into the activity of fishing vessels and carrier vessels. We can also develop bespoke data products that directly support partner countries' fisheries monitoring, control and enforcement programs and drive better maritime domain awareness.



We also use our open data and processing capabilities to generate new scientific research.

GFW has established partnerships with more than 10 leading research institutions and agencies, and we continue to pursue new research collaborations.

More than 25 scientific papers have been published since 2017 using our data, supporting better understanding of the marine environment and evidence-based policy-making.



PORT STATE CONTROLS

Seafood imports and processing are important economic levers for many nations. Ports are the natural focus point for states to conduct inspections and stop IUU fish entering the market. GFW's public vessel tracking supports national efforts to meet port

state requirements and protect against importing IUU seafood. Peru is using GFW data to strengthen its port controls and build risk profiles of vessels that can inform inspection processes and make it harder to land IUU catch in Peru.

FLAG STATE MONITORING

Panama is sharing its VMS data via the GFW platform. As part of our collaboration, our analysis team provides reports on vessels suspected of IUU fishing activity. The reports help Panama formulate cases against non-compliant vessels and cooperate with other countries to support further investigation, an important step to

meeting the requirements of the EU IUU regulation. In July 2019, we gave the country a report on the MV NIKKA, a vessel suspected of IUU fishing. Panama shared this information with Indonesia through INTERPOL and the resulting multilateral investigation led to the vessel's arrest in Indonesian waters.

"Greater transparency in fishing activity is critical to combat illegal fishing and enforce compliance in our fleet worldwide. We are very happy to be sharing our vessel tracking data via the Global Fishing Watch platform and continuing our collaboration."

Flor Torrijos, Director of Authority of the Aquatic Resources of Panama (ARAP)



MARITIME SECURITY

Our data analysis brings to the surface information of interest to maritime security agencies, complementing traditional intelligence programs. The help GFW can provide is not limited to fishing activity. GFW analysis can indicate if fishing vessels may be engaged in illicit activities such as slave labor, trafficking or piracy. Bringing together historical and current data on vessel fishing activity, encounters at sea, port visits, identity changes

and fishing authorizations, GFW provides information that feeds into risk-based enforcement action.

In July and August 2019, GFW supported the US Coast Guard cutter, Mellon, during a patrol in the North Pacific. The patrol resulted in a 344% increase in boardings and uncovered an 867% increase in violations compared to last year's operation.

"GFW's platform provides a vital overlapping layer of intel, giving greater transparency on legitimate vessels and potential violators involved in IUU fishing. Whether you're a large or small national state, to have access to near real-time data on fishing activity in or outside your waters is a very powerful tool. It sheds light on the problem, so that countries with restricted enforcement ability can focus their efforts efficiently on illegal fishing."

Captain Adam B. Morrison, US Coast Guard



© US Coast Guard

COASTAL STATE MONITORING

Many countries have large exclusive economic zones (EEZs), where it is difficult to monitor illegal fishing by foreign vessels; in West Africa alone the cost of illegal fishing is an estimated US\$1.3 billion per year.

Through the use of machine learning algorithms, remote sensing and data sharing, we are able to increase understanding of fishing activity in national waters. For example, GFW can check on a fleet operating within a country's waters, estimating fishing effort and comparing this to what the vessels report. This enables the authorities to identify potential issues and take action accordingly.

We can also help identify IUU fishing risks in coastal waters through analysis of open source remote sensing data to detect 'dark' vessels that have turned off their AIS or VMS transmitters. GFW is also developing programs to include small-scale vessel tracking in our platform, further enhancing our understanding of coastal fishing.

In one recent case, GFW identified a vessel to be 'spoofing' (faking) its position on a tracking system so it appeared to be in the Southern Ocean when it was actually operating inside a closed area in coastal waters. This analysis allowed an East African state to board the vessel and secure further evidence validating the data.

MARINE PROTECTED AREAS MONITORING

The government of Kiribati used GFW data to show that an industrial vessel was fishing illegally in the Phoenix Islands Protected Area, an important site for tuna where commercial fishing is banned. The boat's owners received a US\$1 million fine and agreed to pay a further US\$1 million grant to the Pacific island nation. GFW data is also helping make the case for new reserves. National Geographic's Pristine Seas project

has used GFW data to help establish seven reserves in the past two years: Clipperton Atoll (a French territory in the Pacific), Niue in the South Pacific, Revillagigedo archipelago in Mexico, the Juan Fernández archipelago and Cape Horn in Chile, Yaganes, located just off the southern tip of Argentina, and Namuncurá-Burdwood Bank II in the South Atlantic.

CONTACT US

Together we can advance sustainable and legal global fisheries.

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